YIN (IRENE) LIN

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EDUCATION

Shanghai Jiao Tong University (SJTU), China   2015.9 – 2019.6 (Expected)

Bachelor in Computer Science (CS) **GPA:3.84/4.3, 89.92/100**
Core Courses: Operating Systems (96); C++ Programming (96); Project Workshop of Operating Systems (98); Computer Networks (95); Algorithm & Complexity (90); Artifical Intelligence (94); Machine Learning (96); Advanced Data Management (90)

University of Waterloo (UW), Canada   2018.7 – 2018.10

Research Intern in Software Architecture Group, Cheriton School of Computer Science. (Advised by Prof. Meiyappan Nagappan.)
Graduate Seminar: Graph Data Management (Prof. Semih Salihoglu)

RESEARCH INTERESTS

Database, Distributed systems, Computer Architecture

PUBLICATIONS

Y. Lin, X. Chen, X. Gao, B. Yao, G. Chen, "R^2-Tree: An Efficient Indexing Scheme for Data Center Network", (Accepted) International Conference on Database and Expert Systems Applications (DEXA), 2018

Y. Lin, X. Chen, X. Gao, P. Weng, G. Chen, "MetisRL: A Reinforcement Learning Approach for Dynamic Routing in Data Center Networks", (Under Review) IEEE International Conference on Computer Communications(INFOCOM), 2019

J. Gui, **Y. Lin**, WGJ Halfond, M. Nagappan, "Understanding the Relationship Between Mobile Ad Usage and App Ratings in Android Apps", (Manuscript) ACM SIGSOFT Symposium on the Foundation of Software Engineering/ European Software Engineering Conference (FSE/ESEC), 2019

RESEARCH EXPERIENCES

R2-Tree: Scalable Indexing Schemes for High Dimensional Data   2016.12-2017.12

Shanghai Jiao Tong University – Advisor: Prof. Xiaofeng Gao

- Designed a scalable indexing scheme called R2-Tree for high dimensional data in data centers. Employed the two-layer indexing framework to maintain a global index layer above the structured overlay. Used R-Tree to support both point, range query and used bloom filter to reduce the false positive in the querying process. Conducted the experiments in Amazon's EC2 platform.

MertisRL: Data Center Flow Scheduling Scheme   2017.12-2018.6

Shanghai Jiao Tong University – Advisor: Prof. Xiaofeng Gao (SJTU)

- Used Reinforcement learning (RL) algorithm to dynamically compute the data flow scheduling scheme. Implemented the flow scheduling scheme to the Fat-tree data center topology.

Graph Data Management   2018.6-2018.10

University of Waterloo– Advisor: Prof. Semih Salihoglu

- Reviewed and discussed papers weekly about topics starting from the very early data models and systems to the current day research on these topics.
- Gained a overview of the motivations and design details of different DBMS.

Mining Software Repositories   2018.6-2018.10

University of Waterloo –Advisor: Prof. Meiyappan Nagappan (UW)

- Went through the demo and research track of ICSE 2014-2018 to investigate the usage of development tools. Labled the tools in the papers by their purpose, programming language, availability and so on, then built a website to make the tools more easily accessible for software developers.
- Conducted an A/B test to investigate how different mobile ads usage pattern could affect the user's feeling of mobile apps. This test rules out the influence of the other factors like the content of the apps.

Teaching Experience

Teaching Assistant for *Mathematical Foundations of Computer Science (CS499)*.

Skills

Programming Languages: C/C++ Java, Python, MATLAB, HTML/CSS/JS

Standard Tests

- TOEFL iBT: 108 (Reading 28, Listening 30, Speaking 22, Writing 28)
- GRE: 325+4 (Verbal:157, Quantitative:168, Analytical Writing:4)

Honors and Awards

Mathematical Contest in Modeling, Meritorious Winner (twice, top 10% worldwide)	2017,2018
Chun Tsung Scholar from Shanghai Jiao Tong University (60/~2400, top 2.5% in SJTU)	2017
Huawei Scholarship (8/139, top 5.8% in CS department)	2017
Yitu Scholarship (4/139 top 2.9% in CS department)	2017
Outstanding members from Shanghai Jiao Tong University (top 15% in SJTU)	2017
Academic Scholarship from Shanghai Jiao Tong University (top 10% in SJTU)	2017
Cyrus Tang Scholarship (for outstanding volunteer work)	2017
Shanghai Jiao Tong Univerisity Merit Student(twice)	2017,2018

Academic Services

The 11th International Conference on Combinatorial Optimization & Applications (COCOA), Shanghai, China,
Organization Staff and Emcee of Conference Banquet   2017.12